## **National Transportation Safety Board**



Washington, D.C. 20594

NOV 2 1 2003

Mr. Samuel G. Bonasso Acting Administrator Research and Special Programs Administration Washington, D.C. 20590

Dear Mr. Bonasso:

Thank you for your August 28, 2003, response to the National Transportation Safety Board regarding Safety Recommendations P-02-4 and P-02-5, stated below. These recommendations were issued to the Research and Special Programs Administration (RSPA) as a result of the Safety Board's pipeline accident report of a 16-inch-diameter steel pipeline that ruptured with subsequent fire in Bellingham, Washington, on June 10, 1999.

## P-02-4

Develop and issue guidance to pipeline operators on specific testing procedures that can (1) be used to approximate actual operations during the commissioning of a new pumping station or the installation of a new relief valve, and (2) be used to determine, during annual tests, whether a relief valve is functioning properly.

The Safety Board notes that RSPA will issue an advisory bulletin by December 2003 to provide guidance to pipeline operators on testing procedures for control and relief valves. The guidance will address the issue of testing a control valve that can operate as a pressure-reducing valve, a flow controller, or a relief valve.

Pending issuance of an advisory bulletin as described above, Safety Recommendation P-02-4 is classified "Open—Acceptable Response."

## P-02-5

Issue an advisory bulletin to all pipeline operators who use supervisory control and data acquisition (SCADA) systems advising them to implement an off-line workstation that can be used to modify their SCADA system database or to perform developmental and testing work independent of their on-line systems. Advise operators to use the off-line system before any modifications are implemented to ensure that those modifications are error-free and that they create no ancillary problems for controllers responsible for operating the pipeline.

The Safety Board notes that on July 16, 1999, RSPA issued an advisory bulletin to operators of gas and hazardous liquid pipeline systems on the need to review the capacities of their SCADA systems to operate under abnormal situations. RSPA indicates that it will prepare and issue an additional advisory bulletin to all pipeline operators who use SCADA systems. The notice will address systems development and operations coordination and will advise pipeline operators to establish thorough testing regimes for their SCADA systems for application when modifications or enhancements are being designed and implemented. It will recommend that changes be developed and tested first on off-line workstations, then deployed on-line under close monitoring at times when there are a minimum number of operational changes expected on the pipeline.

The Safety Board also notes that RSPA has initiated a SCADA study to establish a national and uniform perspective on the safety evaluation of pipeline SCADA technology. In addition to developing inspection and guidance criteria, the project will draw on the results of the Safety Board's SCADA survey and report. By the end of 2003, RSPA will review how SCADA systems are referenced, directly or indirectly, in the pipeline safety regulations. In early 2004, RSPA will revise SCADA inspection protocols. Later in 2004, RSPA will begin development of a multi-tier SCADA inspection approach.

The Safety Board further notes that RSPA has also initiated a study of controller certification, and that Section 13(b) of the Pipeline Safety Improvement Act of 2002 directs the Secretary of Transportation to develop tests and other requirements for certifying the qualifications of individuals who operate computer-based systems for controlling the operations of pipelines.

The Safety Board appreciates RSPA's providing these details. Safety Recommendation P-02-5 is classified "Open—Acceptable Response" pending completion of the recommended advisory bulletin.

Sincerely,

Mark V. Rosenker Vice Chairman

cc: Ms. Linda Lawson, Director Office of Safety, Energy, and Environment Office of Transportation Policy